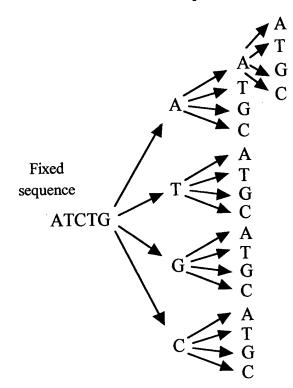
Expanding array of sequences



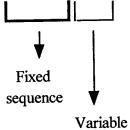
Add A, T, C, and G to the last nucleotide G

Some possible sequences linked to the constant sequence

ATCTGAAA ATCTGAAG ATCTGAAC ATCTGATA ATCTGATT ATCTGATG ATCTGATC

ATCTGTAA ATCTGTAT ATCTGTAG ATCTGTAC

ATCTGCCA ATCTGCCT ATCTGCCG ATCTGCCC



sequences

FIG. 1

5' splice junction: AGGT GGT

3' splice junction: TT TT TT TT TT XAGGT

Promoter region: TATAA

Poly A: ATAATA

Alu repeats: Repeats of about 250 bases

Homeobox: A sequence of about 180 bases

coding for ~ 60 amino acids

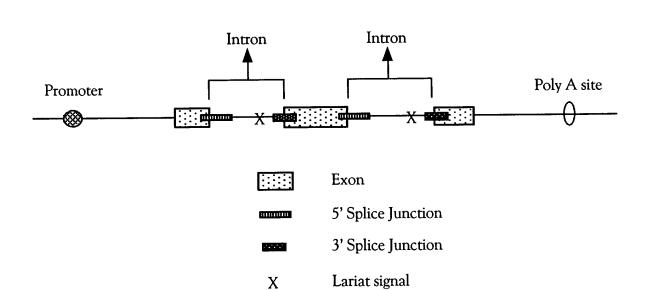
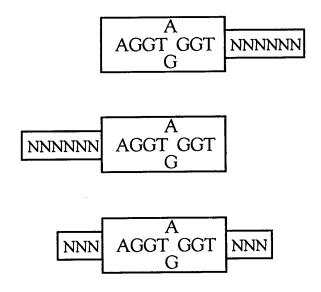


FIG. 2

5' Splice Consensus Primer



Promoter Consensus Sequence:

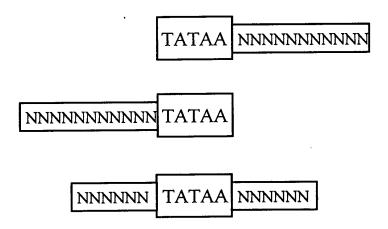


FIG. 3

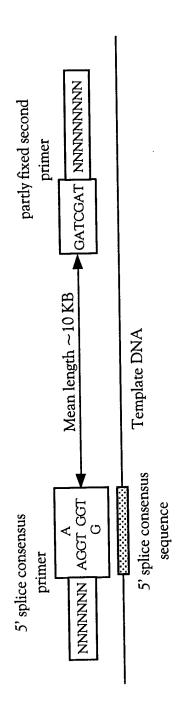
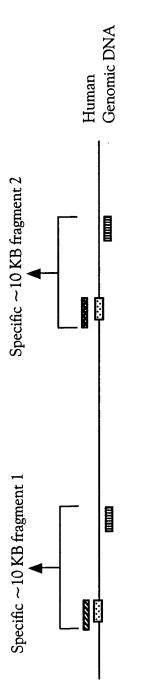


FIG. 4A



5' splice consensus primer binding at location A of the genome

5' splice consensus primer binding at location B of the genome

mm Second, partly fixed degenerate primer

FIG. 4B

PCR amplify between 3' and 5' splice consensus primers

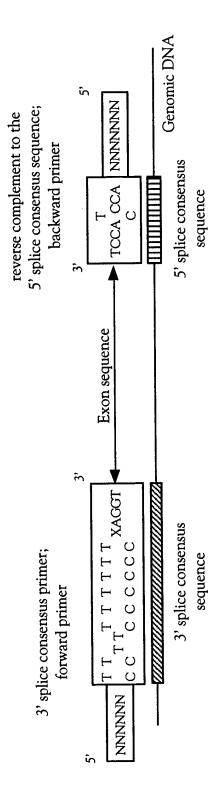


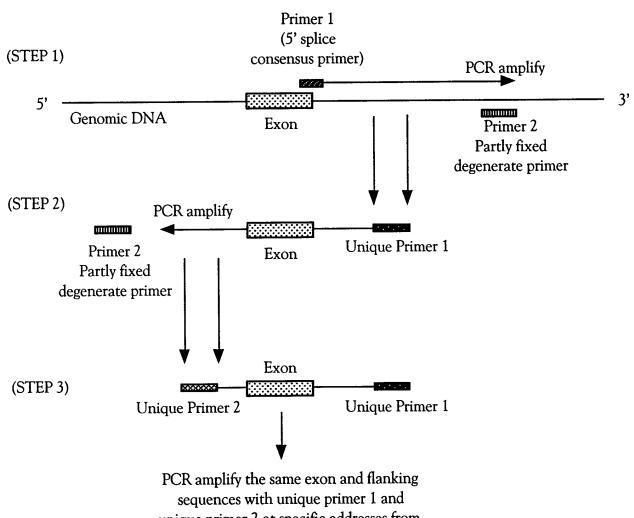
FIG. 5A

Change 3 Ns to individual triplets in a PCR reaction: Total number of triplets/PCR reactions = 64

reverse complement to the 5' splice consensus sequence backward primer

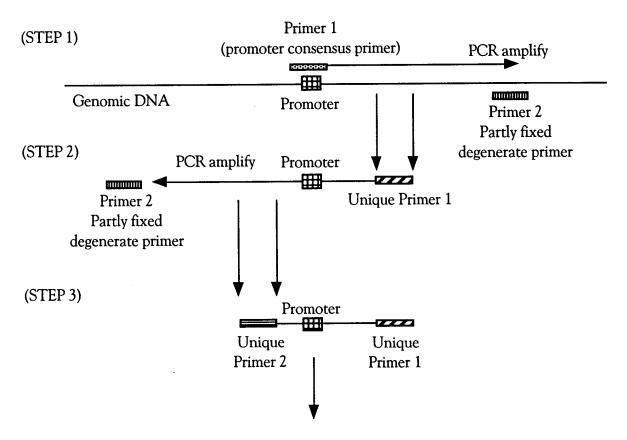
TCCA CCA AGT NNNNN

FIG. 5B



PCR amplify the same exon and flanking sequences with unique primer 1 and unique primer 2 at specific addresses from the genome of different individuals, sequence, and compare for SNPs

FIG. 6



PCR amplify the same promoter and flanking sequences with unique primer 1 and unique primer 2 from the genome of different individuals, sequence and compare for SNPs

FIG. 7